

## Building a Common Vision for a Maine Environmental Public Health Tracking (Surveillance) System



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## Building a Vision for an Environmental Health Tracking (Surveillance) System

- What are the attributes of an ideal Environmental Health tracking System?

## Building a Vision for an Environmental Health Tracking (Surveillance) System

- “A system that has the capacity to:
  - identify emerging issues,
  - identify patterns that address associations between environmental hazard and health data, and
  - seeks opportunities to discern validity between environment and health.”

## Building a Vision for an Environmental Health Tracking (Surveillance) System

- What is public health surveillance?
  - What is Environmental P. Hlth. surveillance?
  - What is research?
  - What is the relationship?
- What are our goals and exceptions for the Maine's EPHTS?

## Public Health Surveillance Defined

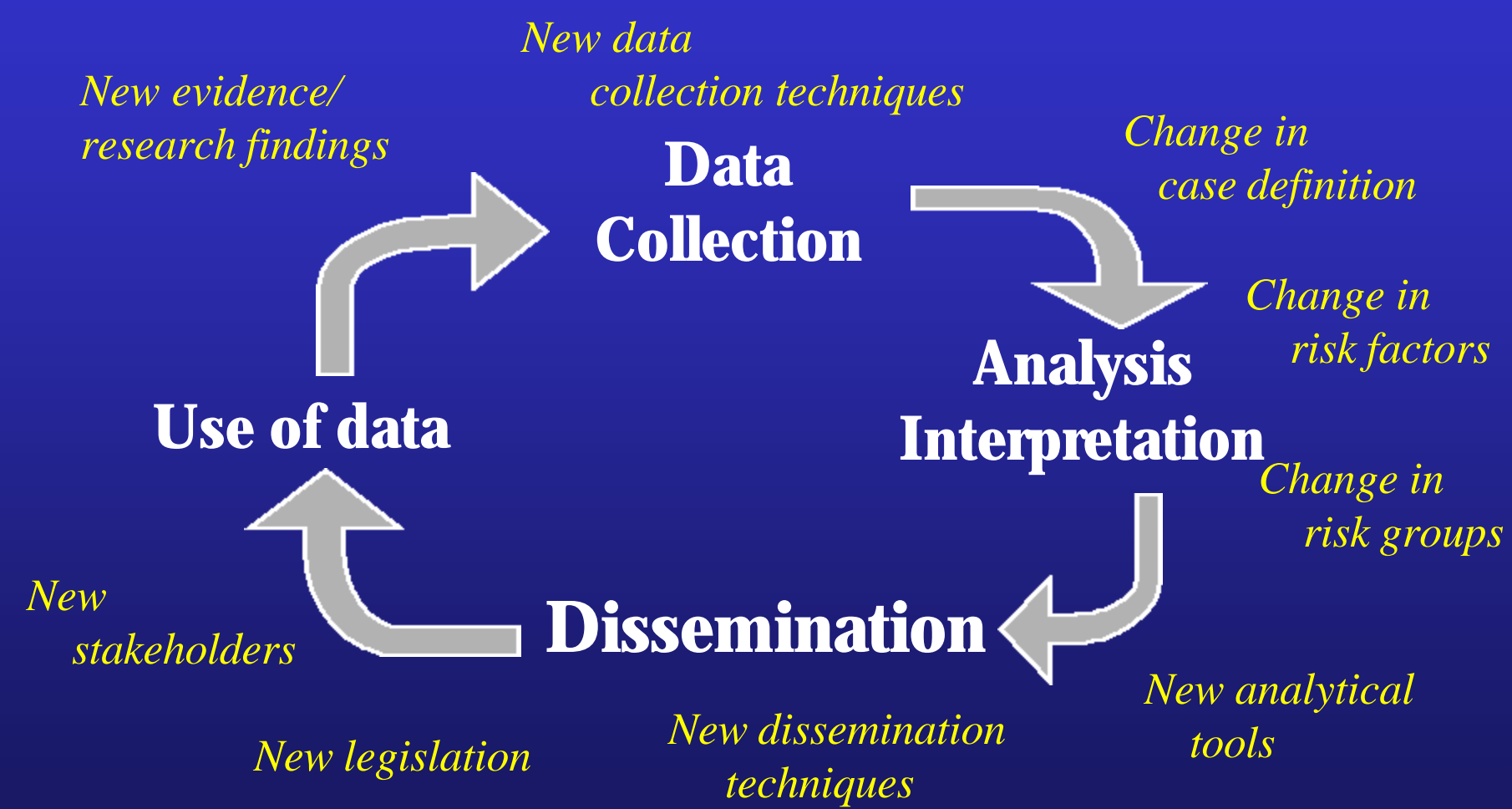
- The ongoing systematic collection of health event data that affect a population,
- The orderly consolidation and evaluation of these data,
- Timely dissemination of the results
- Application for prevention and control

» *Thacker et.al. Future direction of public health surveillance and information systems. AJE. 1994;140:1-15*

## Public health surveillance...

...Produces information for public health action.

## The Public Health Surveillance Loop



## Purpose and Use of Public Health Surveillance

- Assess public health status
  - Magnitude/ baseline prevalence
  - Distribution and spread
  - Trends —→ Detect epidemics
- Define public health priorities
  - Allocate of resources

## Purpose and Use

- To guide, monitor and evaluate prevention or control strategies
- Generate hypotheses

## Public Health Surveillance Defined

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- The orderly consolidation and evaluation of these data,
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## What is Environmental PH Tracking?

The ongoing systematic collection of data

**...”about environmental hazards, exposure to environmental hazards, and human health effects potentially related to exposure to environmental hazards”**

- The orderly consolidation and evaluation of these data,
- Timely dissemination of the results
- Application for prevention and control

## What is Environmental PH Tracking?

- Hazard surveillance
- Exposure surveillance
- Outcome surveillance

*Thacker et.al. Surveillance in Environmental Public Health: Issues, systems and Sources. AJPH. 1996;86(5):633-8*

## Environmental Public Health Surveillance National Model

### State/National data collection

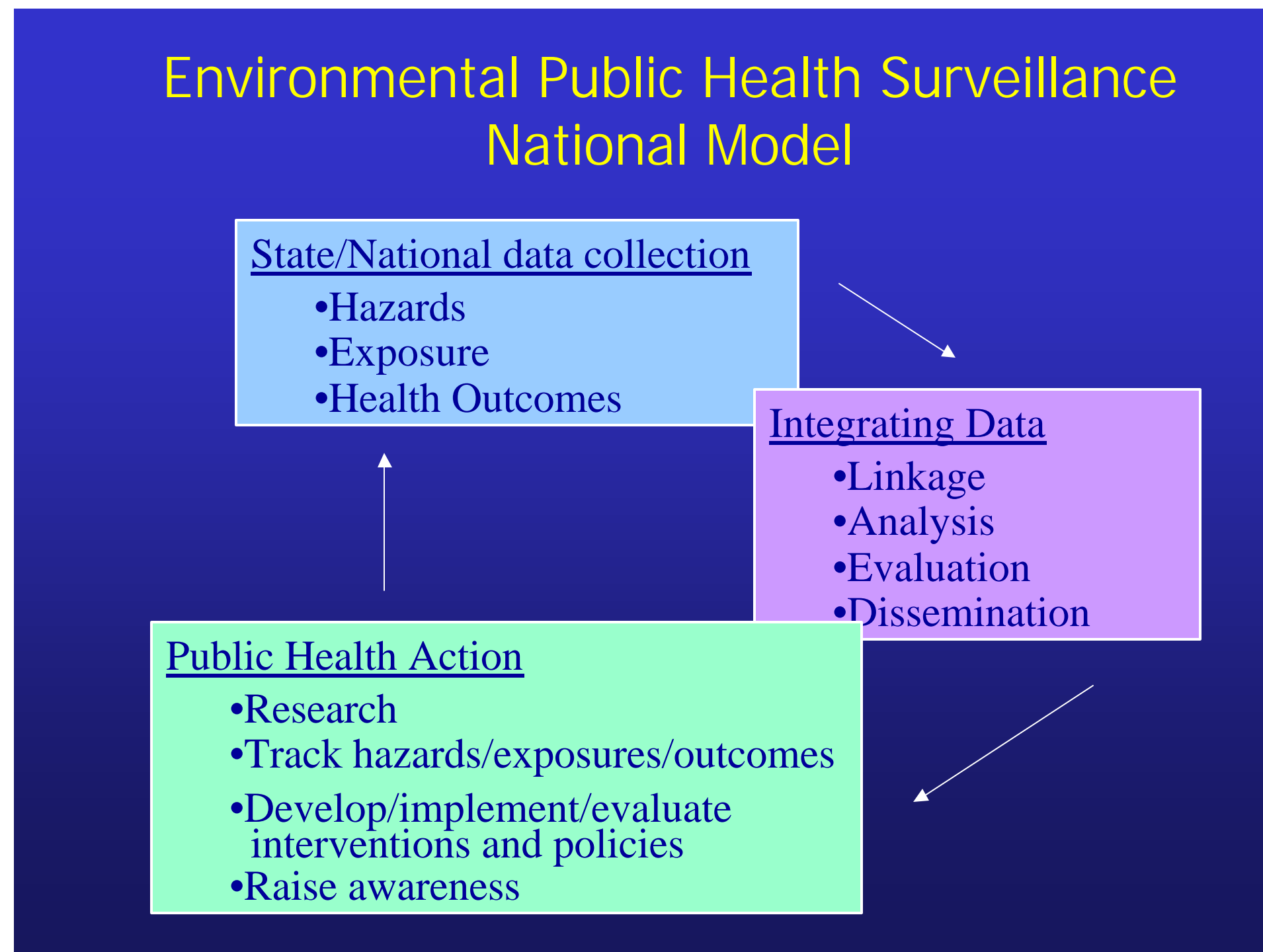
- Hazards
- Exposure
- Health Outcomes

### Integrating Data

- Linkage
- Analysis
- Evaluation
- Dissemination

### Public Health Action

- Research
- Track hazards/exposures/outcomes
- Develop/implement/evaluate interventions and policies
- Raise awareness



## Environmental Public Health Surveillance Goals

- Monitor:
  - prevent adverse public health events
  - detect new events
  - provide efficient and consistent reporting mechanism(s)
- Build core environmental public health capacity

## Environmental Public Health Surveillance Goals

- Track program goals and objectives to
  - aid in program and policy development, planning, and evaluation
  - develop new program initiatives
  - **guide** research initiatives

## PH Surveillance and Research

PH Surveillance is NOT Research.

- Not experimental in design
  - not hypothesis testing
- It is hypothesis generating

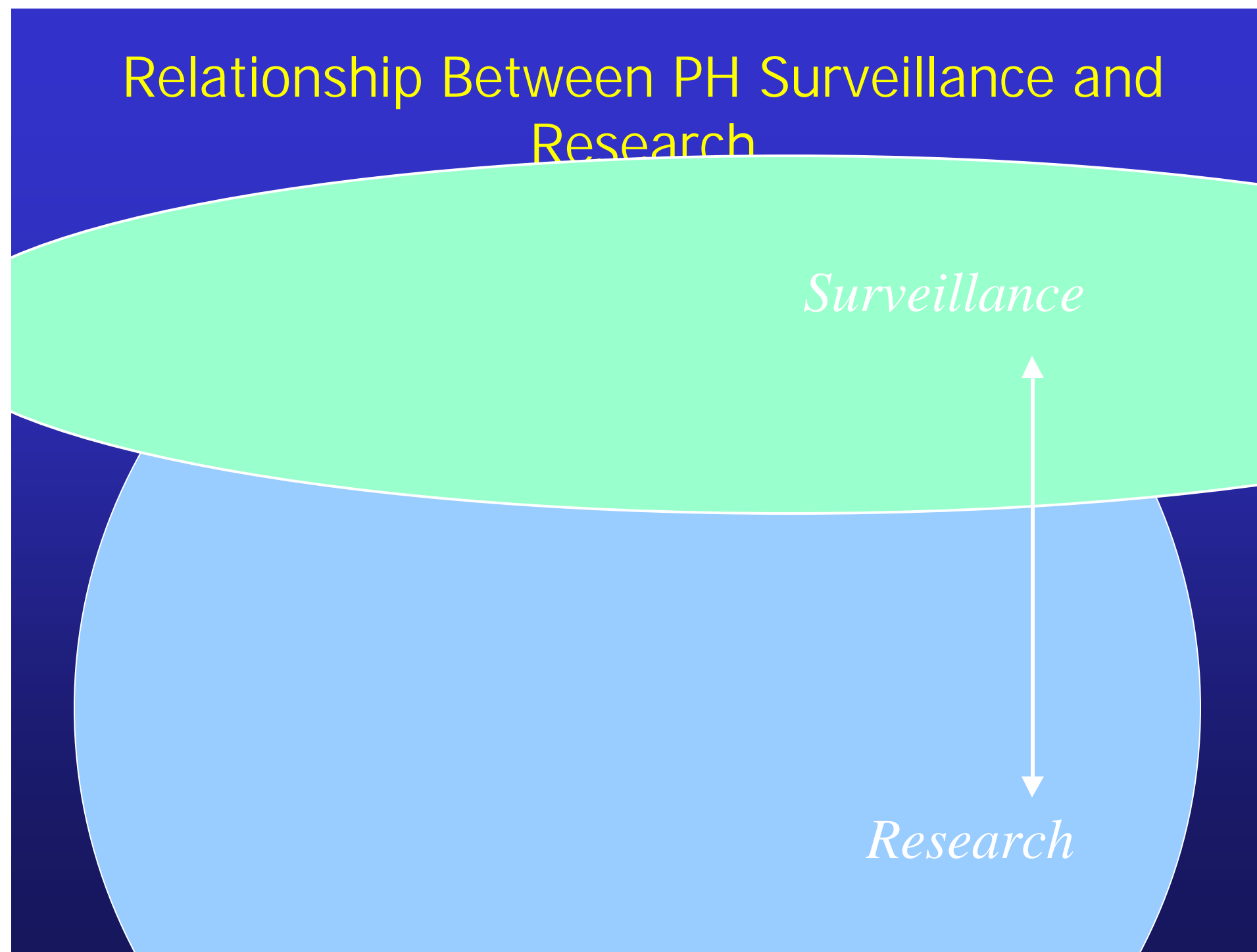
## What is research?

- “...an activity designed to test an hypothesis, permit conclusions to be drawn, and thereby to develop or contribute to generalizable knowledge”
  - The Belmont Report, 1979

# Relationship Between PH Surveillance and Research

*Surveillance*

*Research*



## Relationship Between PH Surveillance and Research

Dangers/Pitfalls in confusing the two

- May overburden a surveillance system
- May over interpret surveillance data
  - Lack of association
  - Positive association

## Building a Vision for a Maine Integrated EPHT System

- This is not research
- Surveillance focused activities
  - Detect associations / generate hypotheses
  - Monitor; assess; evaluate public health program activities

## Building a Vision for an Environmental Health Surveillance (Tracking) System

- Is this our common vision?